

**VERBESINA ZARAGOSANA (ASTERACEAE, HELIANTHEAE), A NEW  
SPECIES FROM NUEVO LEON, MEXICO**

Billie L. Turner

Department of Botany, University of Texas, Austin, Texas 78713 U.S.A.

ABSTRACT

A new species, *Verbesina zaragosana* B. Turner, is described from southern Nuevo León where it occurs on gypsum substrates. It is closely related to the gypsophilic endemic *V. hintoniorum* B. Turner, but is readily distinguished by having larger leaves with an ashy white, densely tomentose vestiture on both surfaces (vs. sparsely to moderately pubescent with stout terete hairs, each hair arising from an enlarged basal complex of cells).

KEY WORDS: Asteraceae, Heliantheae, *Verbesina*, México, gypsophile

Preparation of a systematic treatment of *Verbesina* for México has occasioned the present paper.

*Verbesina zaragosana* B. Turner, *sp. nov.* TYPE: MEXICO. Nuevo León: 3.7 mi N of Zaragosa on road to Aramberri, gypsum outcrops W of road, 10 Oct 1984, Tina J. Ayers & R. Scott 509 (HOLOTYPE: TEX!; Isotype: MEXU).

*Verbesinae hintoniorum* B. Turner similis sed foliis midcaulinis lationibus (plerumque 6-14 mm latis vs. 3-6 mm) dense cineracei-tomentosisque in superficiebus ambabus (vs. sparsim hispidis vel moderate strigosis trichomatibus crassis ascendentibusque, haud tomentosis) differt.

Stiffly erect perennial herbs 50-70 cm high. Leaves alternate throughout, or nearly so, gradually reduced upwards, those at midstem mostly 4-12 cm long, 0.6-1.4 cm wide, scarcely petiolate, densely matted tomentose on both

surfaces, the hairs ashy white, flattened, crinkly, not arising from a pronounced group of basal cells, the margins entire or nearly so. Heads numerous, arranged in foreshortened stiffly branched nearly flat topped cymes, the ultimate peduncles mostly 2-6 cm long. Involucres broadly campanulate to hemispheric, 5-7 mm high, 10-15 mm wide, the bracts 3-4 seriate, moderately graduate, elliptic lanceolate to oblanceolate, tomentulose, apically acute to acuminate. Receptacle broadly conical, the pales 5-7 mm long, glabrous, acuminate. Ray florets 5-8, pistillate, fertile, the ligules yellow, 3-6 mm long, 2-4 mm wide. Disk florets numerous, the corollas yellow, ca. 5 mm long, the tube 0.5-0.8 mm long. Achenes ca. 4 mm long, very broadly winged, the upper part of the wings extending well above the body of the achene and as wide or wider than the body, the inner achenes mostly glabrous, those along the periphery usually sparsely pubescent, somewhat warty with age.

ADDITIONAL SPECIMENS EXAMINED: MEXICO. Nuevo León: Mpio. Galeana, above El Nogal in stunted pine forest, 2250 m, 5 Nov 1983, *Hinton et al. 18093* (TEX); between Galeana and Rayones, 1270 m, 17 Oct 1990, *Hinton et al. 20825* (TEX); Mpio. Aramberri, above Puerto Los Borregos, gypsum hillside, 6 Nov 1991, *Hinton et al. 21762* (TEX).

This taxon is clearly closely related to *Verbesina hintoniorum* B. Turner, having the habit and most of the capitular features of that species. It differs markedly from *V. hintoniorum* in having a densely tomentose, ashy white vestiture on both surfaces of the leaves, the hairs thin and markedly flattened, each hair arising from a relatively thin basal cell (vs. coarsely pubescent, the hairs terete and arising from a group of broad basal cells, not at all ashy white tomentose). When I first examined collections of this taxon I misidentified these as *V. polosina* B. Robinson, the latter possessing foliage superficially similar to *V. zaragosana*. Subsequent collections, mostly by the Hinton family, have shown the latter species to be relatively widespread on gypsum outcrops, as is *V. hintoniorum*, but the two taxa have not been found growing together, nor have intermediates been detected. In short, *V. zaragosana* appears to be a good species, partially sympatric with *V. hintoniorum*, but not intergrading with it.

#### ACKNOWLEDGMENTS

I am grateful to Guy Nesom for the Latin diagnosis and to him and T.P. Ramamoorthy for reviewing the manuscript.